

103C AMPLIFIER



GENERAL

The 103C amplifier consists of a 124C amplifier (less mat and nameplates) mounted in a black finished metal cabinet, which also contains a standby relay and other miscellaneous apparatus to permit standby conditions at reduced voltage and instantaneous full power operation on energizing the standby relay. There is also space provided for installing a 152A repeating coil for supplying microphone current. A bridging input connection is available. For information on this input refer to the 124C amplifier. The 103C is designed for use in paging systems employing carbon microphones.

ELECTRICAL CHARACTERISTICS

Gain - - - - - 58 db.
Source Impedance - - 0 to 1000 ohms. 50 ohms nominal. 50 to 1000 ohms when a 152A repeating coil is used.
Internal Input - - - 150 ohms. 125 ohms when a 152A repeating coil is used.
Internal Output - - - $\frac{3}{4}$ of nominal load impedance.
Load Impedance - - - 1.75, 7.5, 16, 30, 150, and 600 ohms. Also 70-volt loudspeaker distribution line. See OUTPUT CONNECTIONS Table on schematic.

Output Level - - - - +41 dbm (12 watts), 2% total harmonics at 400 cycles. May be reconnected for +42 dbm (20 watts), 5% harmonic content.

Output Noise - - - - -37 dbm (unweighted).

Frequency Response - See Frequency Response Curve.

Gain Control - - - - 45 db continuously variable.

Power Supply - - - - 105-125 volts, 50-60 cycles. Using 12-watt output, 1.1 amperes, 105 watts. Using 20-watt output, 1.25 amperes, 125 watts. Battery supply of 14-60 volts for relay and microphone. Standby power approximately 55 watts.

EQUIPMENT CHARACTERISTICS

Dimensions - - - - - 20-5/16" long, 9-1/16" high, 11" deep including controls.

Weight - - - - - 40 pounds.

Finish - - - - - Black crinkled enamel.

Mounting - - - - - Desk, shelf, etc.

ELECTRON TUBES

(These tubes are not supplied with the amplifier and must be ordered separately.)

	W.E.		COMMERCIAL
2 - - - - -	348A	or	6J7 or 6J7G
2 - - - - -	350B	or	6L6 or 6L6G
1 - - - - -	274B	or	5T4 or 504G

REFERENCES

ES-676175 - - - - - Assembly and Stock Lists.
ES0-676177 - - - - - Wiring Diagram.
ESXX-676176 - - - - - Schematic.
BSP 024-104-103 - - - 124C Amplifier.
BSP 024-104-501 - - - 103 and 124-Type Amplifiers.



